California MEDICINE

OWNED AND PUBLISHED BY THE CALIFORNIA MEDICAL ASSOCIATION
450 SUTTER, SAN FRANCISCO 8 » » PHONE DOUGLAS 0062

EDITORIALS

Vagotomy for Peptic Ulcer

Clinical evaluation of vagotomy for peptic ulcer is still in the formulative stage, but in view of some recent decisive developments and the widespread use and wider interest in this new surgical procedure, a review of the situation seems warranted.

In a previous editorial,[2] it was pointed out that every new method postulated for the treatment of peptic ulcer, particularly if it involved a new operation, immediately aroused the skeptics. The skeptics have now had a chance to raise their voices and, with the added experience of an additional year, have helped to define more clearly the real place of section of the vagus nerves in the surgical treatment of ulcer.

The difficulty in making a fair appraisal of the place of vagotomy in the treatment of ulcer is well illustrated by Priestley[4] who has pointed out that accurate evaluation of the effectiveness of vagotomy in the treatment of ulcer requires, first, that a uniform type of case be considered, second, that the vagotomy be complete and, third, that no associated surgical procedure be performed. Since more and more vagotomies are being performed as a secondary procedure along with such direct attacks on the stomach as resection and gastroenterostomy, the evaluation of the clinical results of vagotomy alone becomes increasingly difficult. Furthermore, insufficient time has elapsed to evaluate critically the results of the operation.

During the past year little of major importance has been added to our knowledge of the physiologic effects of vagotomy on the stomach. Striking decrease in gastric motility, the elimination of the cephalic phase of gastric secretion, the reduction in nocturnal secretion of gastric juice and the disappearance of pain of ulcer are the striking physiologic changes. Perhaps the most important recent observation has been that of Moore and his associates[3] who have noted return to normal gastric motility and gastric secretion, especially nocturnal secretion, one year after vagotomy. Vanzant[5] made similar observations on experimental animals. If some of the important physiologic effects of vagotomy do not "hold," so to speak, the results of the operation may be as transient as are some of the effects on motility of the stomach. In fact one of the most important problems concerning vagotomy now is whether or not the effects of the operation, and therefore the clinical results, will be permanent.

Despite these various problems, enough experience has been gained to evaluate certain aspects of the problem of vagotomy for ulcer.

Is vagotomy the procedure of choice in the management of gastric ulcer? The answer is clearly to be "no." Inability to establish clearly the benign or malignant nature of an ulcerative gastric lesion, except by direct observation of the lesion and pathologic study of it, makes vagotomy alone an unsatisfactory procedure for the treatment of this disease. Vagotomy has been done in an attempt to heal an ulcerative gastric lesion which at the time of operation was not recognized to be a carcinoma. Valuable time may be lost before the true nature of the lesion is discovered. Furthermore, several instances have been repeated in which, following vagotomy and excision of the gastric ulcer, the lesion has returned within a few months.

In what types of cases of duodenal ulcer is vagotomy alone the treatment of choice? Four years ago when the procedure was reintroduced by Dragstedt,[1] and for some time thereafter, it appeared that vagotomy might be the answer to the surgical problem of simple intractible duodenal ulcer if obstruction or acute perforation were absent. Added experience, however, has indicated that vagotomy is not ideal because of the frequency with which

gastric retention ensues though evidence of preoperative pyloric obstruction has been lacking. It is becoming increasingly apparent that vagotomy alone is not the treatment of choice in the surgical management of duodenal ulcer. In an occasional uncomplicated case in a young individual in whom the neurogenic features are striking and in whom gastric resection seems undesirable for various reasons, vagotomy alone may be indicated. However, for most experienced surgeons this group is gradually narrowing and may well eventually disappear.

What about vagotomy in the management of gastro jejunal ulcer? It is in this group of cases that the operation seems to be of the greatest value. The difficulty and lack of success of medical therapy, the considerable risk and occasional impossibility of further gastric resection and the likelihood of recurrence of the lesion make the usual forms of therapy for this condition rather unsatisfactory. Vagotomy can be carried out in such cases with little risk and, since the problem of postoperative gastric retention usually is non-existant because of the previously made anastomosis, this procedure seems indicated.

Should vagotomy be done by surgical approach from above or below the diaphragm? The advantage of the infradiaphragmatic approach is that the lesion in the stomach or duodenum can be observed and be dealt with if necessary at one operation. The disadvantage is that there may be difficulty in completely resecting all of the fibres of the vagus nerves. On the other hand, the supradiaphragmatic approach is simple and permits section of the vagus nerves above the level where they branch into a network and more certainly leads to complete vagotomy. However, the disadvantage of the approach is that it does not permit inspection of the lesion and a second operation may be necessary if uncontrollable gastric retention develops. Moreover in some cases severe postoperative intercostal pain persists for weeks to months. More and more surgeons are using the abdominal approach and it seems that the advantages of this method are the greater.

Finally, should vagotomy be done as a secondary procedure following gastric resection (or gastroenterostomy or pyloroplasty) for ulcer? The answer to this question is not known. It will be a long time before sufficient information has been collected properly to evaluate the results of partial gastrectomy and vagotomy as compared to those of partial gastrectomy alone in the treatment of duodenal ulcer. To a greater extent the answer depends on the ultimate effects of vagotomy on the human stomach, and these are completely unknown. We shall have to wait at least ten years if not longer and have studies of large numbers of carefully controlled and collected cases before establishing or rejecting this combined surgical procedure.

In some way, then, many problems remain to be settled in the use of this most interesting procedure. As it stands now, it appears that simple vagotomy should not be done for gastric ulcer, that it is rarely indicated as a single surgical procedure for duodenal ulcer, that the field of greatest usefulness for it is in the treatment of marginal and jejunal ulcer, and that the usefulness of it as an adjunct to operations resulting in a new gastric stoma remains to be established.

Here then is a simple procedure the results of which cannot be clearly defined or delineated because we have so little knowledge of the ultimate results of section of nerves as large and complex as the vagi.

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Democracy Prevails Again

If there had been any question prior to the 1947 Annual Session about the prevalence of democracy in the California Medical Association, that question was thoroughly resolved by the events of the session. If there were any doubts on this score, they may be eliminated.

As proof of the democratic process at work, twenty-nine resolutions and five proposed constitutional amendments were placed before the House of Delegates. Some of this material represented group presentations from county delegations and some came in the form of emanations from individual members of the House. All were freely offered and fully considered. Each was given its own hearing before a reference committee and the report of the committee on each item was subject to free debate on the floor.

True, some of the resolutions sought to change the policies or operating procedures of the Association. Some offered criticism, constructive or otherwise, and some proposed that new fields of endeavor be explored. Taken all in all, the resolutions constituted a cross-section of the thinking of the medical profession of the state, offered without fear or favor.

From the deliberations of the House of Delegates, two major factors emerged. First, the policies of the Association and its Council were affirmed by